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05/21/2002

SNELL & WILMER ONE ARIZONA CENTER 400 EAST VAN BUREN PHOENIX, AZ 850040001 EXAMINER
MORGAN, ROBERT W

ART UNIT PAPER NUMBER

3626

DATE MAILED: 05/21/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

		. (1					
•	Application No.	Applicant(s)					
•	09/267,176	BURKE ET AL.					
Office Action Summary	Examiner	Art Unit					
	Robert W. Morgan	3626					
The MAILING DATE of this communication app Period for Reply	The MAILING DATE of this communication appears on the cover sheet with the correspondence address						
A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION. - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication. - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely. - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication. - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). - Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).							
Status							
1) Responsive to communication(s) filed on							
· <u> </u>	s action is non-final.						
3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213. Disposition of Claims							
4)⊠ Claim(s) <u>1-42</u> is/are pending in the application	· _						
4a) Of the above claim(s) is/are withdraw							
5) Claim(s) is/are allowed.							
6)⊠ Claim(s) <u>1-42</u> is/are rejected.	∑ Claim(s) <u>1-42</u> is/are rejected.						
7) Claim(s) is/are objected to.							
8) Claim(s) are subject to restriction and/or	election requirement.						
Application Papers							
9) The specification is objected to by the Examiner.							
10)☐ The drawing(s) filed on is/are: a)☐ accepted or b)☐ objected to by the Examiner.							
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).							
	11)☐ The proposed drawing correction filed on is: a)☐ approved b)☐ disapproved by the Examiner.						
If approved, corrected drawings are required in reply to this Office action.							
12) The oath or declaration is objected to by the Examiner.							
Priority under 35 U.S.C. §§ 119 and 120							
13) Acknowledgment is made of a claim for foreign	priority under 35 U.S.C. § 119(a)-(d) or (f).					
a) ☐ All b) ☐ Some * c) ☐ None of:							
1. ☐ Certified copies of the priority documents							
2. Certified copies of the priority documents							
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received. 							
14) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).							
a) The translation of the foreign language provisional application has been received. 15) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.							
Attachment(s)							
1) Notice of References Cited (PTO-892) 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO-1449) Paper No(s)	5) 🔲 Notice of Informal F	r (PTO-413) Paper No(s) Patent Application (PTO-152)					

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DETAILED ACTION

Notice to Applicant

1. This communication is in response to the CPA filed 3/5/02 and the preliminary amendment submitted 4/5/02.

The request filed on 3/5/02 for a Continued Prosecution Application (CPA) under 37 CFR 1.53(d) based on parent Application No. 09/267176 is acceptable and a CPA has been established. An action on the CPA follows.

Claim Rejections - 35 USC § 103

- 2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
 - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 3. Claims 1-21, 32-34 and 40-42 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 6,047,274 to Johnson et al.

As per claim 1, Johnson et al. teaches a method for automatically managing energy cost using metering data and pricing data, the method comprising the steps of:

- --the claimed receiving metering data from a utility meter, wherein the metering data is electronically transmitted from the utility meter is met by the collection of actual energy usage data from the end user's meter (12, Fig. 1) via the Internet (14, Fig. 12) (see: column 20, lines 50-60);
- --the claimed receiving pricing data electronically over a network, wherein the pricing data is associated with a plurality of sources of power is met by the Energy Auction System

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("EAS") that is made available to user via public or private wired or wireless telecommunication facilities (network) that receives information such as price rates from the Moderator (1, Fig. 1)

and each control computer (8, Fig. 1) selects the Provider offering the lowest rate (or best

economic value) at the time the users is using the a particular control computer (8, Fig. 1) (see:

column 9, lines 3-14, 30-47, column 16, lines 28-36 and Fig. 1 and 11); and

--the claimed determining an optimal consumption decision based on the received pricing data and a predictable load, wherein the consumption decision selects one of the plurality of sources of power to thereby reduce utility costs is met by the Energy Providers submitting bids to supply (in order of the lowest-priced bids first) power to the end users and the control computer (8, Fig. 1) selects the best Energy Providers (three lowest) according to their lowest bids and amount of power offered (see: column 9, lines 30-47 and column 15, lines 15-27).

Johnson et al. fails to expressly teach the claimed forecasting a forecast load based on the received metering data from the utility meter.

Johnson et al. teaches the unit or block approach in which a large user can control with some precision how much power or natural gas they consume at any given time or have highly predictable "usage profiles" on a recurring basis (see: column 15, lines 48-52). In addition, Johnson et al. also teaches that residential customers have fairly predictable "usage profile" patterns and would require less monitoring in order to receive prior usage information (see: column 16, lines 10-24).

One of ordinary skill in the art at the time the invention was made would have found it an obvious modification to forecast loads within the system as taught by Johnson et al. with motivation of accurately determining the quantities of a consumer's projected energy usage,

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thereby assisting the user with selection of the lowest-priced Energy Provider to best suit their needs and to satisfy their demands.

As per claim 2, Johnson et al. teaches the claimed step of delivering the optimal consumption decision to a customer is met by the Energy Providers submitting bids to supply (in order of the lowest-priced bids first) power to the end users and the control computer (8, Fig. 1) selects the best Energy Providers (three lowest) according to their lowest bids and amount of power offered (see: column 9, lines 30-47 and column 15, lines 15-27).

As per claims 3-5, Johnson et al. teaches the claimed utility meter comprises an electric meter and a gas meter (see: column 6, lines 4-10).

Johnson et al. fails to teach the claimed utility meter comprises a water meter (see: column 14, lines 4-11).

One of ordinary skill in the art at the time the invention was made could have also used a water meter within the different utility meters namely electric and natural gas as taught by Johnson et al. with motivation of expanding the Johnson system to other utilities thereby increasing the flexibility and functionality of the system to accommodate user preference.

providing the users with projected energy usage information, thereby assisting the user with selection of the lowest-priced Energy Provider to best suit their needs.

As per claim 6, Johnson et al. teaches the claimed metering data is electronically transmitted from the utility meter via a telephone line (see: column 20, lines 50-60 and Fig. 1).

As per claim 7, Johnson et al. teaches an Energy Auction System ("EAS") which is made available to users via public or private wired or wireless telecommunication facilities (network) and receives information such as price rates from the Moderator (1, Fig. 1) and the control

computer (8, Fig. 1) selects the Energy Provider offering the lowest rate (or best economic value) at the time the users is using a particular control computer (8, Fig. 1) (see: column 9, lines 3-14, 30-47, column 16, lines 28-36 and Fig. 1 and 11).

Johnson fails to explicitly teach price data including grid price point data, distributed generation price point data, demand-side management price point data and alternative fuel price point data.

Since Johnson et al. teaches receiving price rates from the Moderator, it would have been obvious to one having ordinary skill in the art at the time invention was made to have distributed generation price point data, demand-side management price point data and alternative fuel price point data within the price rates received from the Moderator in the system as taught by Johnson et al. with the motivation of providing detailed information to the user of relevant price information, thereby ensuring the lowest cost offered by energy companies.

As per claim 8, Johnson et al. teaches the claimed network is the Internet (see: column 20, lines 50-60 and Fig. 11).

As per claims 9-10, Johnson et al. teaches that Energy Providers submit bids to supply (in order of the lowest-priced bids first) power to the end users and the control computer selecting the best Energy Providers according to their lowest bids and amount of power offered (see: column 15, lines 15-27 and Fig. 1). In addition, Johnson et al. also teaches the unit or block approach in which a large user can control with some precision how much power or natural gas they consume at any given time or have highly predictable "usage profiles" on a recurring basis (see: column 15, lines 48-52). Additionally, Johnson et al. teaches that residential customer have

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fairly predictable "usage profile" patterns and would require less monitoring in order to receive prior usage information (see: column 16, lines 10-24).

Johnson et al. fails to explicitly teach determining a price baseline for at least one of the plurality of the sources of power, as a function of the forecast load and of price point data for the at least one of the plurality of sources of power and the forecast load and a percentage of the forecast load which will be met by each of the one or more sources of power.

One of ordinary skill in the art at the time the invention was made would have used price baselines in forecasting of loads and price point data within receiving several Energy Providers bids along and the unit or block approach as taught by Johnson et al. with motivation of accurately computing quantative measures of projected energy usage, thereby assisting the user with selecting the lowest-price Energy Provider to best suit their needs and to satisfy utility demands.

As per claim 12, Johnson et al. teaches Energy Providers submit bids to supply (in order of the lowest-priced bids first) power to the end users and the control computer selecting the best Energy Providers according to their lowest bids and amount of power offered (see: column 15, lines 15-27). Johnson et al. also teaches that each Energy Provider may change its bid as a result of the marketplace demand and in response to competitors' bidding activities (see: column 6, lines 20-36).

As per claim 13, Johnson et al. teaches the claimed additional forecasting data is received via the Internet (see: column 20, lines 50-60 and Fig. 11).

As per claims 14-16, Johnson et al. teaches that Energy Providers submit bids to supply (in order of the lowest-priced bids first) power to the end users and the control computer

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selecting the best Energy Providers according to their lowest bids and amount of power offered (see: column 15, lines 15-27). In addition, Johnson et al. teaches the unit or block approach in which a large user can control with some precision how much power or natural gas they consume at any time or have highly predictable usage profiles on a recurring basis (see: column 15, lines 48-52). Additionally, Johnson et al. also teaches that residential customer have fairly predictable usage profile patterns and would require less monitoring in order to receive usage information (see: column 16, lines 10-24).

As per claim 17, Johnson et al. teaches the claimed optimal consumption decision is delivered to the customer via the Internet (see: column 20, lines 50-60 and Fig. 11).).

As per claim 18, Johnson et al. teaches the claimed allowing the customer to choose to receive power from one or more of the plurality of sources of power. This feature is met by the Energy Providers submitting bids to supply (in order of the lowest-priced bids first) power to the end users and the control computer selecting the best Energy Providers according to their lowest bids and amount of power offered (see: column 15, lines 15-27).

As per claims 19-20, Johnson et al. teaches that the Moderator can prepare and transmit to each end user a consolidated billing statement (see: column 10, lines 14-34 and Fig. 1).

Johnson et al. fails to explicitly teach allowing the customer to pay the bill electronically However, it would have been obvious to one of ordinary skill in the art at the time the invention was made to include allowing the customer to pay the bills electronically within the preparing and transmitting of an end user's consolidated billing statement as taught by Johnson et al. with the motivation of allowing a quick and efficient way to for the customer to manage bill payments.

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As per claim 21, Johnson et al. teaches the claimed automatically implementing the optimal consumption decision, wherein the automatically implementing includes automatically providing power from at least one of the plurality of sources of power to the customer based upon the optimal consumption decision. This limitation is met by the Energy Providers submitting bids to supply (in order of the lowest-priced bids first) power to the end users and the control computer selecting the best Energy Providers according to their lowest bids and amount of power offered (see: column 9, lines 30-47 and column 15, lines 15-27).

As per claim 32-34, Johnson et al. teaches a method used in energy billing statement based on "usage profiling" (also referred to as "load profiling" in the electric power industry) for that a particular customer (i.e., estimating the end user's actual energy usage hour-by-hour, using historical usage levels related to the class or customer into which this end user fits) (see: column 11, lines 1-11). In addition, Johnson also teaches that Energy Providers submit bids to supply (in order of the lowest-priced bids first) power to the end users and the control computer selecting the best Energy Providers according to their lowest bids and amount of power offered (see: column 9, lines 30-47 and column 15, lines 15-27).

As per claims 40-42, Johnson et al. teaches that Energy Providers submit bids to supply (in order of the lowest-priced bids first) power to the end users and the control computer selects the best Energy Providers according to their lowest bids and amount of power offered (see: column 9, lines 30-47 and column 15, lines 15-27). In addition, Johnson et al. also teaches an Energy Auction System ("EAS") that is made available to user via public or private wired or wireless telecommunication facilities (network) that receives information such as price rates from the Moderator and each control computer selects the Provider offering the lowest rate (or

best economic value) at the time the users is associated with that control computer (see: column 9, lines 3-14, 30-47, column 16, lines 28-36 and Fig. 1 and 11).

Johnson et al. fails to explicitly teach a plurality of sources comprises on-site generation of power, demand management system (DSM) and alternative sources.

Since Johnson et al. teaches receiving bids from several Energy Providers, it would have obvious to one having ordinary skill in the art at the time invention was made include on-site generation of power, demand management system (DSM) and alternative sources within the energy bidding system as taught by Johnson et al. with the motivation of increasing the flexibility of the system to accommodate user preferences or alternative in ensuring the lowest cost offered by a variety of energy companies.

4. Claims 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 6,047,274 to Johnson et al as applied to claim 1 above, and further in view of U.S. Patent No. 5,974,369 to Radtke.

As per claim 11, Johnson et al. teaches the unit or block approach in which a large user can control with some precision how much power or natural gas they consume at any time or have highly predictable usage profiles on a recurring basis (see: column 15, lines 48-52). In addition, Johnson et al. also teaches that residential customer have fairly predictable usage profile patterns and would require less monitoring in order to receive usage information (see: column 16, lines 10-24).

Johnson et al. fails to teach the claimed forecasting step further comprises receiving weather data and forecasting a forecast load based on the received metering data from the utility meter and the weather data.

Radtke et al. teaches receiving weather forecast data that is sent back and forth across a network, which helps plan the future use of energy of the customer (see: column 12, lines 41-67).

Therefore, it would have obvious to one of ordinary skill in the art at the time the invention was made to include weather forecast data as taught by Radtke et al. within the energy bidding system as taught by Johnson et al. with the motivation of providing the customer with more accurate projected energy consumption information, by accounting for differences in energy usage due to weather conditions.

5. Claims 22-31 and 37-39 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 6,047,274 to Johnson et al. in view of Official Notice.

As per claim 22, Johnson et al. teaches the collection of actual energy usage data from the end user's meter (12, Fig. 1) via the Internet (14, Fig. 12) (see: column 20, lines 50-60 and Fig. 11). Johnson et al. also teaches an Energy Auction System ("EAS") that is made available to user via public or private wired or wireless telecommunication facilities (network) that receives information such as price rates from the Moderator and each control computer selects the Provider offering the lowest rate (or best economic value) at the time the users is associated with that control computer (see: column 9, lines 3-14, 30-47, column 16, lines 28-36 and Fig. 1 and 11).

Johnson et al. fail to explicitly teach a server communicating with at least one utility meter.

The examiner takes Official Notice that using a server to receive information over a network is old and well known in the computer-business energy management field. Therefore, it would have obvious to person of ordinary skill in the art at the time invention was made to

include at least one server to receive utility information over a network within the energy bidding system via the network as taught by Johnson et al. with the motivation of allowing information to be retrieved over a network more efficiently and effectively.

As per claims 23-25, they are rejected for the same reason set forth in claims 3-6.

As per claim 26, Johnson et al. teaches the claimed at least one utility meter is configured to transmit the metering data via a telephone line (see: column 20, lines 50-60 and Fig. 1).

Johnson fails to explicitly teach transmitting metering data to server via a telephone lines.

The obviousness of incorporating such a feature within the system of Johnson et al. is as discussed above in the rejection of claim 22, and incorporated herein.

As per claims 27-29, Johnson et al. teaches the collection of actual energy usage data from the end user's meter (12, Fig. 1) via the Internet (14, Fig. 12) (see: column 20, lines 50-60 and Fig. 11). Johnson et al. also teaches an Energy Auction System ("EAS") that is made available to user via public or private wired or wireless telecommunication facilities (network) that receives information such as price rates from the Moderator and each control computer selects the Provider offering the lowest rate (or best economic value) at the time the users is associated with that control computer (see: column 9, lines 3-14, 30-47, column 16, lines 28-36 and Fig. 1 and 12).

Johnson et al. fails to explicitly teach at least one central server and at least one regional server for receiving metering data, pricing data from the network, determining the optimal consumption decision and transmit the optimal consumption decision to the at least one regional server and to the customers.

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The obviousness of incorporating such a feature within the system of Johnson et al. is as discussed above in the rejection of claim 22, and incorporated herein.

As per claims 30-31, Johnson et al. teaches the claimed network comprises the Internet and wide area network (see: column 20, lines 50-60 and Fig. 12).

As per claims 37-39, Johnson et al. fails to teach evaluating non-energy costs in producing consumption and purchase plan, labor costs and equipment costs.

The examiner takes Official Notice that non-energy costs evaluation is old and well known in the energy management field. Therefore, it would have obvious to person of ordinary skill in the art at the time invention was made to include evaluating non-energy costs within the energy bidding system as taught by Johnson et al. with the motivation of allowing Energy Provider to accurately compute operational costs to better budget company expenses and set energy prices accordingly.

Claim Rejections - 35 USC § 102

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) do not apply to the examination of this application as the application being examined was not (1) filed on or after November 29, 2000, or (2) voluntarily published under 35 U.S.C.

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122(b). Therefore, this application is examined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

7. Claims 35-36 are rejected under 35 U.S.C. 102(e) as being anticipated by U.S. Patent No. 6,047,274 to Johnson et al.

As per claim 35, Johnson et al. teaches collection of actual energy usage data from the end user's meter (12, Fig. 1) via the Internet (14, Fig. 12) (see: column 20, lines 50-60 and Fig. 1). Johnson et al. also teaches that Energy Providers submit bids to supply (in order of the lowest-priced bids first) power to the end users and the control computer selecting the best Energy Providers according to their lowest bids and amount of power offered (see: column 9, lines 30-47 and column 15, lines 15-27). In addition, Johnson et al. teaches a Moderator database that stores the identity of Energy Provider(s) selected to supply power or natural gas to the user as well as meter reading reports which are provided to Moderator that include actual consumption by the end user during a particular period (see: column 18, lines 14-31).

As per claim 36, Johnson et al. teaches a plurality of sources of power comprises off-grid sources of power (see: column 15, lines 53-67).

Response to Arguments

7. Applicant's arguments with respect to claim 1-42 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

In related art (6,115,698) Tuck et al. discloses electric energy, which can be traded between utility companies.

In related art (6,169,979) Johnson teaches a computer-based system for generating customized proposals relating to consumption and cost utilities.

In related art (6,343,277) Gaus et al. a computer-based method of facilitating a transaction between an energy consumer-client desiring an energy contract and an energy supplier.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Robert W. Morgan whose telephone number is 703-605-4441. The examiner can normally be reached on 8:30 a.m. - 5:00 p.m. Mon - Fri.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Joseph Thomas can be reached on 703-305-9588. The fax phone numbers for the organization where this application or proceeding is assigned are 703-746-7239 for regular communications and 703-746-7238 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-305-3900.

KWM rwm

May 17, 2002

JOSEPH THOMAS SUPERVISORY PATENT EXAMINER TECHNOLOGY CENTER 3600